

GOLF CLUB HEAD

BACKGROUND OF THE INVENTION

1. Field of the Invention

5 This is a Continuation-in-part application of Serial Number 09/885,965, filed June 22, 2001, entitled "Shock-Absorbing Golf-Club Head".

 This invention relates to a golf club head, particularly to one provided with an angle-indicating
10 device for a golfer to strike a ball by adjusting the striking angle and action by checking the point of the angle indicating marks pointed by a pointing member of the device so as to stabilize striking a ball.

2. Description of the Prior Arts

15 The number of people playing golf has been increasing as this sport has been growing popular, and beginners always learn its technique from experienced players about striking postures, angles of the gold club to a ball, etc. incessantly making practice to upgrade
20 striking stability. In teaching techniques of playing golf, a tutor may at first verbally explain various key points of correct methods for striking, and learners have to actually hold a golf club and strike a ball personally to gradually acquire better tricks, spending not a few time
25 to correct and adjust their own postures and striking actions. The stabilized striking always affects the flying direction of a ball, but it may be difficult to maintain

the same striking point of a ball and the striking angle to a ball. The main reason of this drawback lies in the golf club head not provided any indicating marks to let players to confirm the striking point and the striking
5 angle of a golf club head to a ball, so beginners or not so experienced players cannot strike a ball accurately.

SUMMARY OF THE INVENTION

The purpose of the invention is to offer a golf club head provided with an angle indicating marks for a
10 player to adjust the striking angle of a gold club head to a ball for enhancing striking stability.

The feature of the invention is an angle indicating device provided in an upper portion of a club head to be easily seen by a player, and the angle indication device
15 includes an pointing member rotatable with a gravity center positioned very low to point one of plural indicating marks formed on an upper surface of the device. Then a player can look at the pointing member and adjust its position to one of the indicating marks for
20 the correct angle of the striking surface of the club head towards the ball.

BRIEF DESCRIPTION OF DRAWINGS

This invention will be better understood by referring to the accompanying drawings, wherein:

25 Figure 1 is an exploded perspective view of a golf club head in the present invention;

Figure 2 is a perspective view of the golf club head

in the present invention;

Figure 3 is a side cross-sectional view of the golf club head positioned to strike a ball in one angle in the present invention;

5 Figure 4 is a side cross-sectional view of the golf club head to strike a ball in another angle in the present invention;

Figure 5 is a side cross-sectional view of the golf club head to strike a ball in another angle in the present
10 invention;

Figure 6 is a side view of the golf club heads in the present invention contained in a golf club bag; and,

Figure 7 is an upside view of the golf club head in the present invention.

15 DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

A preferred embodiment of a golf club head 1 in the present invention, as shown in Fig. 1, includes a ferrule 11 at one side for connecting a golf club 12, a
20 striking surface formed in a front side, and an angle indicating device 2 fixed in an upper surface nearly parallel to the striking direction.

The angle indicating device 2 consists of a supporting case 21 almost U-shaped to have an interior
25 hollow defined by two lengthwise vertical walls, two opposite side walls, a closed bottom and an open top side, and a plurality of angle indicating marks 211 shown by

means of slender cut lines, letters, figures, etc. Further, the angle indicating device 2 consists of a rotary shaft 22 positioned between the two lengthwise sides and a pointing member 22 rotatably supported by the rotary shaft 22 to have its center of gravity very near to the bottom to keep its top end always pointing to the upper side, for example, shaped like a water drop, a pointed cone, an inverted cone or a round shape. Its top end is not necessarily pointed, but a preferably bright colored obvious mark 231 to be easily seen. Fig. 2 shows the angle indicating device 2 positioned in a golf club head 1, with the pointing member 23 having its top pointing upward to one of the indicating marks 211 on one of the two longwise walls of the supporting case 21 because of its low center of gravity attracted by the terrestrial gravitation. The angle indicating marks 211 can not only be made on the upper surface of either of the two lengthwise walls of the supporter 21, but on any location on the upper surface of the club head 1 near the pointing member 23.

In using, a golf player stands at a proper location for striking a ball, with the striking surface of his/her club head placed near a ball 3, taking measure by eyesight and adjusting the bodily position to the best position and the best angle for striking. In the process of measuring and adjusting, the player looks at one of the indicating marks 211 pointed by the pointing member 23,

checking the angle between the striking surface 13 and the contacting surface of the ball 3. For example, as shown in Fig. 3, when the top end 231 of the pointing member 23 points the center one of the indicating angle marks 211, the striking surface 13 of the club head 1 is vertical against the ball 3. This striking angle may let a club head strike the ball 3 to a medium distance, so a player makes practice with this angle and becomes familiar with this striking technique and then proceeds to practice striking for a long distance and a short distance.

Next, as shown in Fig. 4, in order to strike a ball to a comparatively long distance, the striking point is to be a little lower than the center of gravity of a ball 3. Then a player holds the club to let the club head 1 with its striking surface 13 a little raised up, with the pointing member 23 having its top end pointing to one of the angle indicating marks 211 near the striking surface 13 to let the striking point a little higher than the center of gravity of the ball 3. Then the ball may fly high to a comparatively long distance.

Next, as shown in Fig. 5, in order to strike a ball to a comparatively short distance or on a down slope, the striking surface 13 has to slope down, with the rotary shaft 22 functioning as a pivot to let the pointing member 23 rotate. Then the top of the indicating member 23 points to a rather far point of the indicating marks

211 from the striking surface 13. Therefore, the ball 3 may fly in a direction almost near the ground, reaching a short distance from the striking point.

After a player finishes practice, all the golf clubs
5 are placed in a golf club bag 4 as shown in Fig. 6, with the club heads 1 located to extend out of the bag 4, with the grips (not shown in the Figures) located downward in the bag 4. At this condition, the pointing member 23 rotates with the rotary shaft 22 as a pivot, the bottom of
10 the pointing member 23 points to the angle indicating marks 211 with its top still at the upper side pointing to the bottom of the club head 1. Then the top of the pointing member 23 is hidden in the head 1, not to be contacted by fingers, safe and convenient.

15 Utilizing the angle indication device 2 of the invention, a golf player can look at the top of the pointing member 23 located between the two walls of the supporting case 21 for controlling the striking angle and the flying distance of a ball after struck. At the same
20 time, as the angle indicating device 2 has the angle indicating marks 211, a player can look at the top of the pointing member 23 and knows the location it points for speculating the possible effect of striking. Then the player can be aware of the distance a ball flies by
25 looking at the location of the indicating marks 211 pointed by the top of the pointing member 23 by long-term practice and experience. This function of the club

head is very difficult to be achieved by conventional golf club heads, assisting a player learn and obtain the hints of striking techniques in a short term.

Another characteristic of the invention is that the
5 top of the pointing member 23 is brilliantly colored or painted with fluorescent powder or the like, making the obvious mark 231. So a player cannot fail to find out the angle indicating marks 211 the top of the pointing member 23 points to, adding much convenience for
10 finding the best angle for striking a club head. Especially, a maker can make the indicating marks very stark and obvious for a player to depend on them for practicing. Maybe the angle indicating marks can be made extremely clear for tall persons, as shown in Fig. 7.
15 In addition, the angle indication marks can be slender cut lines, alphabets, characters, figures, or signs.

While the preferred embodiment has been described above, it will be recognized and understood that various modifications may be made therein and the
20 appended claims are intended to cover all such modifications that may fall within the spirit and scope of the invention.